WHAT IS CLAIMED IS:

1.   A method of building a load with product from an infeed area, the method comprising:

defining a desired volume of the load using a length sensor, a width sensor, and a height sensor;

automatically filling the volume with product; and

determining when the volume is filled.

2.   The method of claim 1, wherein defining the desired volume includes positioning at least one of the length sensor, the width sensor, and the height sensor to define at least one of the respective length, width, and height of the volume.

3.   The method of claim 1, wherein defining the desired volume includes positioning the width sensor and the height sensor to define the desired width and desired height of the desired volume of the load.

4.   The method of claim 1, wherein filling the volume includes sensing the location of product previously placed on the load.

5.   The method of claim 4, wherein filling the volume further includes transporting new product with a transporting means to a location adjacent the sensed location of the previously placed product on the load.

6.   The method of claim 1, wherein defining the desired volume includes setting a desired height of the load by positioning the height sensor.

7.   The method of claim 1, wherein defining the desired volume includes setting a desired length of the load by positioning the length sensor.

8.   The method of claim 7, wherein positioning the length sensor includes adjusting the position of the length sensor to define the length of a product row on a conveyer.

9.   The method of claim 1, wherein defining the desired volume includes setting a desired width of the load by positioning the width sensor.

10.   The method of claim 1, wherein the transporting means includes a product holder configured to place the product within the desired volume, and wherein filling the volume with product includes monitoring the location of the product holder relative to the load.

11.   The method of claim 10, wherein monitoring the location of the product holder includes:

        sensing previously placed product below the product holder.

12.   The method of claim 10, wherein the monitoring the location of the product holder includes:

        sensing previously placed product to the side of the product holder.

13.   The method of claim 10, wherein filling the volume with product further includes moving the product holder above and next to previously placed product, as sensed by at least one sensor; and

        depositing the product from the product holder next to and on top of the previously placed product.

14.   The method of claim 1, wherein filling the volume with product includes:

        transporting a row of product at a first speed for a first portion of a journey from a product conveyor to the load; and

transporting the row of product at a second, relatively slower speed during a second portion of a journey from the product conveyor to the load.

15. The method of claim 1, wherein filling the volume with product includes executing a logic sequence in a controller, and repeating the same logic sequence for at least two consecutive transporting cycles.

16. The method of claim 1, wherein the transporting means includes:

a product holder configured to place the product within the volume;

a horizontal support and a vertical support configured to support the product holder.

17. The method of claim 16, further including monitoring the position of the horizontal support relative to the vertical support to determine when the load reaches the desired height.

18. The method of claim 16, further including monitoring the position of the product holder relative to the horizontal support to determine when the load reaches a desired width.

19. The method of claim 16, further including monitoring product on a product conveyer to determine when the product forms a product row of the desired length.

20. The method of claim 1, wherein determining when the volume is filled includes monitoring at least two of the length, the width, and the height sensors for a signal indicating that at least two of the desired length, the desired width, and the desired height are of the load are reached.

21.   The method of claim 20, wherein determining when the volume is filled further includes receiving a signal from the at least two monitored sensors at a controller.

22.   The method of claim 1, further including pushing a completed load from a loading zone of a palletizer.

23.   The method of claim 1, wherein automatically filling the volume includes one of placing a product unit on the load to build a row, placing a product row on the load to build a layer, and placing a product layer on the load to build the load.

24.   A method of building a load with product from an infeed area, the method comprising:
       defining a desired area of a load to be filled with product using at least two of a height sensor, a length sensor, and a width sensor;
       automatically filling the desired area with product; and
       determining when the area is filled.

25.   The method of claim 24, wherein defining the desired area includes positioning at least one of the length sensor, the width sensor, and the height sensor to define the respective length, width, or height of the area.

26.   The method of claim 24, wherein filling the desired area includes sensing the location of previously placed product on the load.

27.   The method of claim 24, wherein filling the desired area includes sensing the location of the pallet.

28.   The method of claim 26, wherein filling the desired area further includes depositing the product upon the sensed location of the product previously placed on the load.

29.   The method of clam 24, wherein filling the desired area includes sensing a desired location of the product and placing the product to fill the area.

30.   The method of claim 24, wherein defining the desired area includes setting a desired height of the load by positioning the height sensor.

31.   The method of claim 24, wherein defining the desired area includes setting a desired length of the load by positioning the length sensor.

32.   The method of claim 31, wherein positioning the length sensor includes adjusting the position of the length sensor to define the length of a product row on a conveyer.

33.   The method of claim 24, wherein automatically filling includes moving the product with a product holder configured to place the product within the desired area, and monitoring the location of the product holder relative to the product load.

34.   The method of claim 33, wherein the monitoring the location of the product holder includes:
    sensing previously placed product below the product holder.

35.   The method of claim 33, wherein monitoring the location of the product holder includes:
    sensing previously placed product to the side of the product holder.

36.   The method of claim 33, wherein automatically filling the area with product includes moving the product holder above and next to previously placed product, as sensed by at least one sensor; and

depositing the product from the product holder next to and on top of the previously placed product.

37.   The method of claim 24, wherein filling the area with product includes:

transporting a row of product at a first speed for a first portion of a journey from a product conveyor to the load; and

transporting the row of product at a second, relatively slower speed during a second portion of the journey from the product conveyor to the load.

38.   The method of claim 24, wherein filling the area with product includes executing the same logic sequence in a controller for at least two consecutive transporting cycles.

39.   The method of claim 24, wherein the transporting means includes:

a product holder configured to place the product within the area;

a horizontal support and a vertical support configured to support the product holder.

40.   The method of claim 39, further including monitoring the position of the horizontal support relative to the vertical support to determine when the load reaches the desired height.

41.   The method of claim 39, further including monitoring the position of the product holder relative to the horizontal support to determine when the load reaches a desired length.

42.   The method of claim 39, further including monitoring product on a product conveyer to determine when the product forms a product row of the desired length.

43.   The method of claim 24, wherein determining when the area is filled includes monitoring the at least two of the height sensor, the length sensor, and the width sensor for a signal indicating that at least two of a desired height, length, and width of the load is reached.

44.   The method of claim 43, wherein determining when the area is filled further includes receiving a signal from the at least two monitored sensors at a controller.

45.   The method of claim 44, wherein the controller is comprised of more than one processor.

46.   The method of claim 24, further including pushing a completed load from a loading zone of a palletizer.

47.   The method of claim 24, wherein automatically filling the desired area includes one of placing a product unit on the load to build a row, placing a product row on the load to build a layer, and placing a product layer on the load to build the load.

48.   A method of building a load with product from an infeed area, the method comprising:
            automatically moving a product from the infeed area to a load building area;
            automatically depositing the product on the load;
            automatically repeating the moving and depositing steps by repeating a single logic sequence for at least two consecutive moving and depositing steps; and
            automatically determining when the load is completely built.

49. The method of claim 48, wherein the automatically moving and automatically depositing steps define a transport cycle, and wherein a controller executes the single logic sequence for each transport cycle of the load.

50. The method of claim 48, wherein the logic sequence is defined in computer executable code configured to be executed by a processor.

51. The method of claim 48, wherein automatically repeating the automatically moving and automatically depositing steps includes loading a first product having a first size onto a load and loading a second product having a second size onto the same load.

52. The method of claim 48, wherein repeating the single logic sequence for at least two consecutive moving and depositing steps includes:

moving and depositing a first product having a first size in first moving and depositing steps; and

moving and depositing a second product having a second size in second, successive moving and depositing steps.

53. The method of claim 48, further including building a second load with second product having a second size, different than the size of the first product, wherein when building the second load, a controller repeats the same single logic sequence.

54. The method of claim 48, further including sensing a desired location of the product and placing the product on the load.

55. The method of claim 48, further including defining a desired volume of the load by positioning at least one of a width sensor, a length sensor, and a height

sensor to define a desired width, a desired length, and a desired height of the desired volume of the load.

56. The method of claim 55, further including filling the defined volume by sensing the location of previously placed product on the load, and depositing the product on the load based upon the sensed location of the previously placed product.

57. The method of claim 55, wherein defining the desired volume includes:
setting a desired height of the load by positioning the height sensor;
setting a desired length of the load by positioning the length sensor; and
setting a desired width of the load by positioning the width sensor.

58. The method of claim 57, further including:
changing the position of at least one of the height sensor, the length sensor, and the width sensor to define a second, different desired volume of a second load after the first load is complete.

59. The method of claim 48, further including monitoring the location of the product holder relative to the load.

60. The method of claim 59, wherein the monitoring the location of the product holder includes:
sensing previously placed product below the product holder;
sensing previously placed product to the side of the product holder; and
depositing the product on the load based upon the sensed previously placed product.

61. The method of claim 48, wherein moving the product includes:
transporting a row of product at a first speed for a first portion of a journey from a product conveyor to the load; and

transporting the row of product at a second, relatively slower speed during a second portion of the journey from the product conveyor to the load.

62.   The method of claim 48, wherein moving and depositing the product includes executing the single logic sequence in a controller, and repeating the single logic sequence for at least two consecutive transporting cycles.

63.   The method of claim 48, further comprising a product holder configured to place the product on the load; and

a horizontal support and a vertical support configured to support the product holder.

64.   The method of claim 63, further including:

monitoring the position of the horizontal support relative to the vertical support to determine when the load reaches the desired height;

monitoring the position of the product holder relative to the horizontal support to determine when the load reaches a desired width; and

monitoring product on a product conveyer to determine when the product forms a product row of the desired length.

65.   The method of claim 48, wherein determining when the load is completely built includes monitoring at least two of a length, a width, and a height sensor for a signal indicating that at least two of a desired length, a desired width, and a desired height of the load are reached; and

receiving the signal from the at least two monitored sensors at a controller.

66.   The method of claim 65, wherein the controller includes more than one processor.

67.   A method of building a load with product from an infeed area, the method comprising:

defining a desired area of the load to be filled;

automatically transporting product to the desired area of the load;

automatically repeating the transporting step by repeating a single logic sequence for at least two consecutive transporting cycles; and

automatically determining when the load is completely built.

68.   The method of claim 67, wherein defining a desired area includes positioning first and second sensors to define the area.

69.   The method of claim 68, wherein the first and second sensors are one of the following sets of sensors: height and width sensors; height and length sensors; and length and width sensors.

70.   The method of claim 67, further including repeating the single logic sequence for each transporting cycle of the load.

71.   The method of claim 67, wherein the single logic sequence is defined in computer executable code configured to be executed by a processor.

72.   The method of claim 67, wherein automatically repeating the transporting step includes loading a first product having a first size onto a load and loading a second product having a second size onto the same load.

73.   The method of claim 67, wherein repeating the single logic sequence for at least two consecutive transporting cycles includes:

transporting a first product having a first size in a first transporting cycle; and

transporting a second product having a second size in second, successive transporting cycle.

74.   The method of claim 67, further including building a second load with second product having a second size, different than the size of the first product,

wherein when building the second load, a controller repeats the same single logic sequence.

75.   The method of claim 67, further including defining a desired volume of the load by positioning at least one of a width sensor, a length sensor, and a height sensor to define a desired width, a desired length, and a desired height of the desired volume of the load.

76.   The method of claim 75, further including filling the defined volume by sensing the location of previously placed product on the load, and depositing the product on the load based upon the sensed location of the product previously placed on the load.

77.   The method of claim 75, further including sensing a desired location of the product and automatically depositing the product in a desired location.

78.   The method of claim 75, wherein defining the desired volume includes:
setting a desired height of the load by positioning the height sensor;
setting a desired length of the load by positioning the length sensor; and
setting a desired width of the load by positioning the width sensor.

79.   The method of claim 78, further including:
changing the position of at least one of the height sensor, the length sensor, and the width sensor to define a second, different desired volume of a second load after the first load is complete.

80.   The method of claim 67, further including monitoring the location of a product holder relative to the product load.

81.   The method of claim 80, wherein the monitoring the location of the product holder includes:

sensing previously placed product below the product holder;

sensing previously placed product to the side of the product holder; and

depositing the product on the load based upon the sensed previously placed product.

82.   The method of claim 67, wherein transporting product includes:

transporting a row of product at a first speed for a first portion of a journey from a product conveyor to a load; and

transporting the row of product at a second, relatively slower speed during a second portion of a journey from the product conveyor to the load.

83.   The method of claim 67, wherein transporting the product includes executing the single logic sequence in a controller, and repeating the single logic sequence for at least two consecutive transporting cycles.

84.   The method of claim 67, including a product holder configured to place the product within the desired area; and

a horizontal support and a vertical support configured to support the product holder.

85.   The method of claim 67, further including:

monitoring the position of the horizontal support relative to the vertical support to determine when the load reaches the desired height;

monitoring the position of the product holder relative to the horizontal support to determine when the load reaches a desired width; and

monitoring product on a product conveyer to determine when the product forms a product row of the desired length.

86.   The method of claim 67, wherein determining when the load is completely built includes monitoring at least two of a length, a width, and a height

sensor for a signal indicating that at least two of a desired length, a desired width, and a desired height of the load are reached; and

receiving the signal from the at least two monitored sensors at a controller.

87. A palletizer for automatically building a load with product from an infeed area, comprising:

means for defining a desired volume of a load including a length sensor, a width sensor, and a height sensor;

means for transporting product from an infeed area to the load; and

a controller associated with means for defining the desired volume, the controller being configured to receive signals from the sensors and to automatically control movement of the means for transporting, and wherein the controller is configured to automatically determine when the volume is filled.

88. The palletizer of claim 87, wherein at least one of the length sensor, the width sensor, and the height sensor is configured to be positioned to define at least one of the respective length, width, and height of the load.

89. The palletizer of claim 87, wherein the width sensor and the height sensor are adjustable and define a desired width and a desired height of the desired volume of the load.

90. The palletizer of claim 87, further including a product sensor configured to sense the location of previously placed product on the load.

91. The palletizer of claim 90, wherein the means for transporting is directable by signals from the product sensor to deposit the product to build the load.

92. The palletizer of claim 87, wherein the height sensor is configured to be positioned to define a desired height of the load.

93.   The palletizer of claim 87, wherein the width sensor is configured to be positioned to define a desired width of the load.

94.   The palletizer of claim 87, wherein the length sensor is configured to be positioned to define a desired length of the load.

95.   The palletizer of claim 94, further including a product conveyor, the length sensor being positioned along the conveyer, and configured to monitor the length of a row of product on the conveyor.

96.   The palletizer of claim 87, wherein the width sensor is configured to be set at a desired width of the load.

97.   The palletizer of claim 87, wherein the means for transporting product includes a product holder configured to place the product within the volume, the palletizer including a product sensor associated with the transporting means, the product sensor being configured to monitor the location of the product holder relative to the product load.

98.   The palletizer of claim 97, wherein the product sensor is configured to sense previously placed product below the product holder.

99.   The palletizer of claim 97, wherein the product sensor is configured to sense previously placed product to the side of the product holder.

100.   The palletizer of claim 97, wherein the controller is configured to move the product holder above and next to previously placed product, as sensed by the product sensor; and

configured to direct the product holder to deposit the product from the product holder next to and on top of the previously placed product.

101. The palletizer of claim 87, wherein the controller is configured to control the movement of the transporting means at a first speed during a first segment of moving the product and at a second, slower speed during a second segment of moving the product.

102. The palletizer of claim 87, wherein the controller includes a logic sequence for moving the transporting means, the controller being configured to execute the same logic sequence for at least two consecutive transporting cycles.

103. The palletizer of claim 87, wherein the transporting means includes:
a product holder configured to place the product within the volume; and
a horizontal support and a vertical support configured to support the product holder.

104. The palletizer of claim 103, wherein the height sensor is associated with one of the horizontal support and the vertical support, the height sensor being configured to monitor the position of the horizontal support relative to the vertical support to determine when the load reaches the desired height.

105. The palletizer of claim 103, wherein the width sensor is associated with one of the product holder and the horizontal support, the width sensor being configured to monitoring the position of the product holder relative to the horizontal support to determine when the load reaches a desired width.

106. The palletizer of claim 103, further including a product conveyer, and wherein the length sensor is associated with the product conveyer and configured to determine when the product forms a product row of the desired length on the conveyer.

107. The palletizer of claim 87, wherein the controller is configured to monitor at least two of the length, the width, and the height sensors for a signal

indicating that at least two of the desired length, the desired width, and the desired height are reached.

108. The palletizer of claim 107, wherein the controller is configured to receive a signal from the at least two monitored sensors when the volume is filled.

109. The palletizer of claim 87, wherein the palletizer is configured to load product of more than one size without using a different program in the controller.

110. The palletizer of claim 109, wherein the controller includes more than one processor.

111. The palletizer of claim 87, wherein the means for transporting product is a three-axis system for placing a product unit on the load.

112. The palletizer of claim 87, wherein the means for transporting product is a two-axis system for placing a row of product on the load.

113. A palletizer for building a load with product from an infeed area, comprising:
    a first sensor configured to define a first desired dimension of the load;
    a second sensor configured to define a second desired length of the load, the desired first and second dimensions of the load defining a desired area of the load to be filled with product;
    means for transporting product from an infeed area to the load to fill the desired area with product; and
    a controller associated with the sensors, the controller being configured to receive signals from the first and second sensors and to control movement of the means for transporting, and wherein the controller is configured to determine when the defined area is filled.

114. The palletizer of claim 113, wherein the first and second sensors are configured to be positioned to define the desired length and the desired height of the desired area of the load.

115. The palletizer of claim 113, further including a product sensor configured to sense the location of previously placed product on the load.

116. The palletizer of claim 115, wherein the means for transporting is directable by signals from the product sensor to deposit the product to build the load.

117. The palletizer of claim 113, wherein the first sensor is configured to be set at a desired height of the load.

118. The palletizer of claim 113, wherein the second sensor is configured to be set at a desired length of the load.

119. The palletizer of claim 118, further including a product conveyor, the sensor being positioned along the conveyer, and configured to monitor the length of a row of product on the conveyor.

120. The palletizer of claim 113, wherein the means for transporting includes a product holder configured to place the product within the area, the palletizer including a product sensor associated with the transporting means, the product sensor being configured to monitor the location of the product holder relative to the product load.

121. The palletizer of claim 120, wherein the product sensor is configured to sense previously placed product below the product holder.

122. The palletizer of claim 120, wherein the product sensor is configured to sense previously placed product to the side of the product holder.

123. The palletizer of claim 120, wherein the controller is configured to move the product holder above and next to previously placed product, as sensed by the product sensor; and

configured to direct the product holder to deposit the product from the product holder next to and on top of the previously placed product.

124. The palletizer of claim 113, wherein the controller is configured to control the movement of the means for transporting at a first speed during a first portion of a journey from a product conveyor to the load and at a second, relatively slower speed during a second portion of the journey from the product conveyor to the load.

125. The palletizer of claim 113, wherein the controller includes a logic sequence for directing the means for transporting, the controller being configured to repeat the same logic sequence for at least two consecutive transporting cycles.

126. The palletizer of claim 113, wherein the means for transporting includes:

a product holder configured to place the product within the area; and

a horizontal support and a vertical support configured to support the product holder.

127. The palletizer of claim 126, wherein the first sensor is associated with one of the horizontal support and the vertical support, the first sensor being configured to monitor the position of the horizontal support relative to the vertical support to determine when the load reaches the desired height.

128. The palletizer of claim 126, wherein the second sensor is associated with one of the product holder and the horizontal support, the second sensor being

configured to monitor the position of the product holder relative to the horizontal support to determine when the load reaches a desired length.

129. The palletizer of claim 126, further including a product conveyer, and wherein the second sensor is associated with the product conveyer and configured to determine when a complete row of product forms on the conveyer.

130. The palletizer of claim 113, wherein the controller is configured to monitor the first and the second sensors for a signal indicating that the desired length and the desired height are reached.

131. The palletizer of claim 130, wherein the controller is configured to receive a signal from the first and second sensors when the area is filled.

132. The palletizer of claim 113, wherein the palletizer is configured to load product of more than one size without using a different program in the controller.

133. The palletizer of claim 113, wherein the means for transporting product is a three-axis system for placing a product unit on the load.

134. The palletizer of claim 113, wherein the means for transporting product is a two-axis system for placing a row of product on the load.

135. A palletizer for building a load with product from an infeed area, comprising:

means for transporting the product from the infeed area to a position on a load, wherein transportation of the product from the infeed area to the load is a transporting cycle; and

a controller configured to control the movement of the means for transporting to convey the product and deposit the product on the load, wherein the controller is configured to repeat a single logic sequence for at least two consecutive transporting

cycles, and wherein the controller is configured to determine when the load is complete.

136. The palletizer of claim 135, wherein the controller includes a computer processor and wherein the single logic sequence is defined in computer executable code configured to be executed by the processor.

137. The palletizer of claim 135, wherein the controller is configured to control the means for transporting to load a first product having a first size onto the load and loading a second product having a second size onto the same load.

138. The palletizer of claim 135, wherein the controller is configured to direct the means for transporting to convey and place a first product having a first size on the load, and convey and successively place a second product having a second size on the load while repeating the same single logic sequence.

139. The palletizer of claim 135, further including: a width sensor, a length sensor, and a height sensor associated with the controller, the width sensor, the length sensor, and the height sensor being configured to define a desired volume of the load by defining desired width, a desired length, and a desired height of the load.

140. The palletizer of claim 139, wherein the controller is configured to direct the means for transporting to fill the defined volume by sensing the location of previously placed product on the load, and depositing the product on the load based upon the sensed location of the previously placed product.

141. The palletizer of claim 139, wherein the height sensor is configured to be positioned to establish the desired height, wherein the length sensor is configured to be positioned to establish the desired length, and wherein the width sensor is configured to be positioned to establish the desired width.

142.   The palletizer of claim 135, wherein the means for transporting includes a product holder configured to deposit the product on the load, the controller being further configured to monitor the location of the product holder relative to the product load.

143.   The palletizer of claim 142, further including:

a first sensor configured to sense previously placed product below the product holder; and

a second sensor configured to sense previously placed product at the side of the product holder, wherein the controller is configured to monitor the location of the product holder using signals from the first and second sensors, and configured to direct the means for transporting to deposit the product on the load based upon the signals.

144.   The palletizer of claim 135, wherein the controller is configured to direct the means for transporting at a first speed for a first portion of the transporting cycle and at a second, relatively slower speed during a second portion of the transporting cycle.

145.   The palletizer of claim 135, wherein the controller is configured to convey and place the product using same logic sequence for at least two consecutive transporting cycles.

146.   The palletizer of claim 135, wherein the means for transporting includes a product holder configured to place the product on the load; and

a horizontal support and a vertical support configured to support the product holder.

147.   The palletizer of claim 146, further including:

a height sensor configured to sense the position of the horizontal support relative to the vertical support to determine when the load reaches a desired height;

a width sensor configured to sense the position of the product holder relative to the horizontal support to determine when the load reaches a desired width; and

a length sensor configured to sense product on a product conveyer to determine when the product forms a product row of the desired length.

148. The palletizer of claim 135, wherein the controller is configured to monitor at least two of a length sensor, a width sensor, and a height sensor for a signal indicating that at least two of a desired length, a desired width, and a desired height of the load are reached.

149. The palletizer of claim 135, further including at least one sensor operably associated with the means for transporting for sensing the location of previously placed product.

150. The palletizer of claim 148, wherein the controller is configured to direct the means for transporting to deposit the product on the load based upon the sensed location of the previously placed product.

151. A system for building and wrapping a load, comprising:

a palletizer for building a load with product from an infeed area, the palletizer including,

means for transporting the product from the infeed area and placing the product to build a load, wherein transporting the product and placing the product is a transporting cycle; and

a controller configured to control the movement of the means for transporting the product and depositing the product on the load based on a signal from at least one sensor, wherein the controller is configured to repeat the same logic sequence for at least two consecutive transporting cycles;

a packaging material dispenser associated with the palletizer for wrapping the load; and

means for providing relative rotation between the packaging material dispenser and the load.

152. The system of claim 151, wherein the controller is configured to direct the means for transporting to place a first product having a first size on the load, and transport and successively place a second product having a second size on the load while repeating the same logic sequence.

153. The system of claim 151, further including: a width sensor, a length sensor, and a height sensor associated with the controller, the width sensor, the length sensor, and the height sensor being configured to define a desired volume of the load by defining a desired width, a desired length, and a desired height of the load.

154. The system of claim 153, wherein the controller is configured to direct the means for transporting to fill the defined volume by determining the location of previously placed product on the load, and depositing new product on the load based upon the sensed location of the previously placed product.

155. The system of claim 153, wherein the height sensor is configured to establish the desired height, wherein the length sensor is configured to establish the desired length, and wherein the width sensor is configured to the desired width.

156. The system of claim 153, wherein the means for transporting includes a product holder configured to deposit the product on the load, the palletizer further includes:

a first sensor configured to sense previously placed product below the product holder; and

a second sensor configured to sense previously placed product at the side of the product holder, wherein the controller is configured to monitor the location of the

product holder based on signals from the first and second sensors, and configured to deposit the product on the load based upon the signals.

157. The system of claim 151, wherein the controller is configured to direct the means for transporting to convey and place the product by repeating a logic sequence in a controller for at least two consecutive transporting cycles.

158. The system of claim 151, wherein the controller is configured to monitor at least two of a length, a width, and a height sensor for a signal indicating that at least two of a desired length, a desired width, and a desired height of the load is reached.

159. The system of claim 151, further including at least one sensor operably associated with the means for transporting for sensing the location of previously placed product.

160. The system of claim 159, wherein the controller is configured to control movement of the means for transporting to deposit the product on the load based upon the sensed location of the previously placed product.

161. The system of claim 151, further comprising a pallet dispenser disposed adjacent the palletizer to dispense a pallet to the palletizer.

162. A method for building and wrapping a load, comprising:
transporting product from an infeed area to a load building area;
sensing the location of previously placed product;
depositing the product on a load based upon the sensed location of the previously placed product;
repeating the transporting, sensing, and depositing logic sequence for consecutive transporting cycles to build the load; and
wrapping the load with a packaging material dispenser.

163. The method of claim 162, wherein repeating the transporting, sensing, and depositing and depositing logic sequence includes transporting a first product having a first size to the load, and successively transporting a second product having a second size to the load while repeating a logic sequence.

164. The method of claim 162, further including:

defining a desired load volume by defining a desired width, a desired length, and a desired height of the load.

165. The method of claim 164, wherein defining the desired height includes positioning a height sensor to set the desired height of the load, wherein defining the desired length includes positioning a length sensor to set the desired length of the load, and wherein defining the desired width includes a width sensor to set the desired width of the load.

166. The method of claim 162, wherein transporting product is accomplished using a product holder configured to move the product, and further including:

    sensing previously placed product below the product holder;

    sensing previously placed product at the side of the product holder; and

    depositing the product on the load based upon the position of the sensed previously placed product.

167. The method of claim 162, wherein transporting, sensing, and placing the product repeats a logic sequence in a controller, the logic sequence being repeated for at least two consecutive transporting cycles.

168. The method of claim 167, wherein transporting, sensing, and placing the product repeats the logic sequence for each transporting cycles of the load.

169. The method of claim 162, further including:

monitoring at least two of a length, a width, and height sensors for a signal indicating that the load has reached at least two of a desired length, a desired width, and a desired height.

170. The method of claim 162, further including sensing the location of previously placed product.

171. The method of claim 170, further including directing the means for transporting to deposit the product on the load based upon the sensed location of the previously placed product.

172. A method of building a load with product from an infeed area, the method comprising:

defining a desired volume of the load using a length sensor, a width sensor, and a height sensor;

automatically filling the volume with product by executing a first logic sequence in a controller, and repeating the first logic sequence for at least two transporting cycles, and executing a second logic sequence in the controller for a different transporting cycle while building the load; and

determining when the volume is filled.

173. A method of building a load with product from an infeed area, the method comprising:

defining a desired area of a load to be filled with product using at least two of a height sensor, a length sensor, and a width sensor;

automatically filling the desired area with product by executing a first logic sequence in a controller, and repeating the first logic sequence for at least two transporting cycles, and executing a second logic sequence in the controller for a different transporting cycle while building the load; and

determining when the area is filled.